

REMARKS

By the above amendment, the title has been amended to be more clearly indicative of the claimed invention, the status of the parent application has been updated, claims 1-15 and 17 have been canceled without prejudice or disclaimer of the subject matter thereof, with claim 16 being amended to clarify features thereof and new dependent claims 18-21 presented, which dependent claims depend directly or indirectly from claim 16.

Turning to amended claim 16, this claim has been amended to more clearly recite the features of the present invention as illustrated in Fig. 25. As illustrated therein, in the pixel region, two pixel electrodes (PX) extend in the direction of extension of the video signal lines DL and in a similar manner, a plurality of counter electrodes (CT) also extend in the extension direction of the video signal lines. As shown, the ends of the pixel electrodes (PX) which are not connected at one end thereof and are proximate to the gate lines (GL) have the edges thereof extend beyond edges of the counter electrodes (CT) in a direction perpendicular to an extension direction of the gate signal lines. With this structure, it is enabled that the space between neighboring pixel electrodes can be used as a display region and enables an increase in aperture ratio for the liquid crystal display device. Applicants submit that such features as now clearly recited in claim 16 in the recitation of at least two pixel electrodes and that all edges of the pixel electrodes which are unconnected at one end thereof extend beyond edges of the counter electrodes in a direction perpendicular to an extension direction of the gate signal lines, should be considered in compliance with 35 U.S.C. 112, second paragraph, and applicants submit that such features patentably distinguish over the cited art as will become clear from the following discussion.

As to the rejection of claims 2, 7 and 12 under 35 U.S.C. 112, second paragraph, it is noted that such claims have been canceled by the present amendment and this rejection has therefore been obviated.

With regard to the rejection of claims 6 and 11 under 35 U.S.C. §102(e) as being anticipated by US 5,852,485 (Shimada et al); the rejection of claim 1 under 35 U.S.C. §103(a) as being unpatentable over US 5,852,485 (Shimada et al) in view of US 6,335,770 (Komatsu); the rejection of claims 2-5, 7-10 and 12-15 under 35 U.S.C. §103(a) as being unpatentable over Shimada and Komatsu and further in view of US 5,907,379 (Kim et al); such rejections are considered to be obviated by the cancellation of the aforementioned claims, such that a discussion of the cited art in relation thereto is considered unnecessary.

As to the rejection of claims 16 and 17 under 35 U.S.C. §103(a) as being unpatentable over US 5,852,485 (Shimada et al) in view of US 5,907,379 (Kim et al), this rejection is traversed insofar as it is applicable to the present claims, and reconsideration and withdrawal of the rejection are respectfully requested.

At the outset, it is noted that by the present amendment, claim 17 has been canceled without prejudice or disclaimer of the subject matter thereof, such that the rejection with respect to claim 17 has been obviated.

With regard to the requirements to support a rejection under 35 U.S.C. 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under §103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed

invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

With respect to claim 16, the Examiner recognizes that "Shimada does not explicitly disclose that all edges of the pixel electrodes extend beyond edges of the counter electrodes in a direction perpendicular to an extension direction of the gate signal lines (GL) (vertical direction)" (emphasis added). In fact, applicants submit that Shimada et al fails to provide any disclosure of such feature. Furthermore, by the present amendment, claim 16 has been amended to recite a plurality of pixel regions having at least a counter electrode and at least two pixel electrodes, and applicants submit that Shimada et al in Figs. 11-14 also fails to disclose the feature

of at least two pixel electrodes in the pixel regions. Furthermore, it is apparent that Shimada et al in addition to failing to disclose the feature previously set forth in claim 16 also does not disclose that "all edges of the pixel electrodes which are unconnected at one end thereof extend beyond edges of the counter electrodes in a direction perpendicular to an extension direction of the gate signal lines", as now recited in such claim. Thus, applicants submit that claim 16, as amended, patentably distinguishes over Shimada et al in the sense of 35 U.S.C. §103.

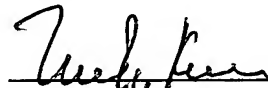
Recognizing the deficiencies of Shimada et al, the Examiner refers to Kim et al contending that this patent in relation to Figs. 4-6 shows that "all edges of the pixel electrodes pattern (45, 46, 43, 44) extend beyond edges of the counter electrodes (21, 22, 23)". Irrespective of this position by the Examiner, applicants note that the structural arrangement of Kim et al differs substantially from that of Shimada et al and applicants submit that it cannot be considered obvious in the sense of 35 U.S.C. §103 to make the modification as suggested by the Examiner, other than by a hindsight reconstruction attempt utilizing the principal of "obvious to try" which is not the standard of 35 U.S.C. §103. See In re Fine, supra. Furthermore, it is readily apparent that Kim et al does not disclose that "all edges of the pixel electrodes which are unconnected at one end thereof extend beyond edges of the counter electrodes in a direction perpendicular to an extension direction of the gate signal lines". That is, as is clearly disclosed in Kim et al, the pixel electrodes 45 and 46 are interconnected at ends thereof by pixel electrode portions 43 and 44 so as to form the pattern indicated. Thus, it is readily apparent that Kim et al also fails to provide the claimed structural arrangement as now recited in claim 16. Hereagain, the combination of Kim et al and Shimada et al fails to provide the claimed features as set forth in claim 16 and the dependent claims, and applicants submit that all claims should be considered to patentably distinguish over this proposed combination of references in the sense of 35 U.S.C. §103.

As to the newly added dependent claims 18-21, claim 18 recites the feature that edges of the pixel electrodes and counter electrodes are spaced from the gate signal lines which is clearly not disclosed in the cited art as well as the layer structure and spacing and extension direction of the counter electrodes and the pixel electrodes in relation to the claimed features of claim 16. As such, all claims present in this application patentably distinguish over the cited art in the sense of 35 U.S.C. §103 and should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that all claims remaining in this application should now be in condition for allowance, and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (501.36862CC3) and please credit any excess fees to such deposit account.

Respectfully submitted,



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